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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,313	11/30/2001	Woong Hee Chae	HI-0056	3016

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EXAMINER
DOAN, DUYEN MY

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/997,313	CHAE, WOONG HEE
	Examiner	Art Unit	
	Duyen M Doan	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 November 2001</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Detail Action

Claims 1-25 are presented for examination.

Applicant is reminded that in order for a patent issuing on the instant

application to obtain the benefit of priority based on priority papers filed in parent

Application No. 71969/2000 under 35 U.S.C. 119(a)-(d) or (f), a claim for such

foreign priority must be timely made in this application. To satisfy the

requirement of 37 CFR 1.55(a)(2) for a certified copy of the foreign application,

applicant may simply identify the application containing the certified copy.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kang (us pat 6205581) in view Abrol et al (us pat 6542734).

As regarding claim 1, Kang discloses allocating a socket corresponding

to a call control processor (CCP) in each one of a plurality of target processors

(col.3, line 1-24 (loading the target application block corresponding to the target

processor)); communicating with each one of the plurality of target processors

using the allocated socket (col.4, line 45-67); releasing the socket allocated to a

selected processor based on a reception state of a status message (col.4, line 45-67, col.5, line 1-5). Kang discloses the allocating of memory and freeing of memory corresponding to ccp in each one of target processors but he does not expressly disclose the allocating of socket and releasing of socket.

Abrol discloses allocating socket (col.10, line 23-31). Releasing the socket (col.10, line 32-46).

It is obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Kang with the teaching of Abrol et al to release the socket of the target processor because by releasing the socket if it is not in use will prevent the ISP to lose revenue by such waste of an unused but heretofore unallocable channel resource, as the ISPs are unable to service more users. As Abrol et al mentioned the state machine transitions the socket to the null state, which frees up the socket and makes it available for re-use (see Abrol et al col.9, line 9-13).

As regarding claim 2, Kang-Abrol et al discloses transmitting a status confirmation message to the selected target processor if the status message corresponding to the selected target processor is not received by the CCP (see Abrol et al col.8, line 47-67, col.9, line 1-34); determining whether the status confirmation message has been received by the target processor; and determining whether to release the allocated socket according to the determination of the receipt of the status confirmation message (see Abrol et al col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 2.

As regarding claim 3, Kang-Abrol et al discloses the status confirmation message is transmitted to the selected target processor if the status message is not received from the selected target processor within a prescribed period of time (see Abrol col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 3.

As regarding claim 4, Kang-Abrol et al discloses the prescribed period of time commences when the CCP sends a status request message to the selected target processor (see Abrol col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 4.

As regarding claim 5, Kang-Abrol et al discloses determining whether the selected target processor is in a down state according to a response to the status confirmation message; and releasing the socket allocated to the selected target processor if the target processor is in a down state (see Abrol et al col.8, line 47-67). The same motivation was utilized in claim 1 applied equally as well to claim 5.

As regarding claim 6, Kang-Abrol et al discloses the target processor is in a down state if no response is received to the status confirmation message (see Abrol col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 6.

As regarding claim 7, Kang-Abrol et al discloses determining whether the corresponding selected target processor has an error according to a response to the status confirmation message; and allocating a new socket rather than releasing the formerly allocated socket according to the result of the

determination (see Abrol et al col.9, line 1-34). The same motivation was utilized

in claim 1 applied equally as well to claim 7.

As regarding claim 8, Kang-Abrol et al disclose the selected target

processor is determined to have an error if a response to the status confirmation

message is received (see Abrol et al col.9, line 1-34).

As regarding claim 9, Kang-Abrol et al discloses determining that the

selected target processor is in a down state when the CCP receives no response

to the status confirmation message and determining that the selected target

processor has a socket error when the CCP receives a response to the status

confirmation message (see Abrol et al col.8, line 47-67, col.9, line 1-34). The

same motivation was utilized in claim 1 applied equally as well to claim 8.

As regarding claim 10, Kang-Abrol et al discloses the socket allocated to

the selected target processor is released if it is determined that the selected

target processor is in the down state, and wherein the socket allocated to the

selected target processor is re-allocated if it is determined that the selected

target processor has the socket error (see Abrol et al col.8, line 47-67, col.9, line

1-34). The same motivation was utilized in claim 1 applied equally as well to

claim 10.

As regarding claim 11, Kang-Abrol et al discloses the transmission of the

status confirmation message is executed using a User Datagram Protocol (see

Abrol et al col.10, line 42-46). The same motivation was utilized in claim 1

applied equally as well to claim 11.

As regarding claim 12, Kang-Abrol et al discloses releasing the socket allocation further comprises of transmitting a status change message generated on the basis of the status message to the selected target processor when the status message is received (see Abrol et al col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 12.

As regarding claim 13, Kang-Abrol et al-Chebrolu disclose the reception state is one of received and not received (see Abrol et al col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 1 applied equally as well to claim 13.

As regarding claim 14, is rejected for the same rationale as claim 1.

As regarding claim 15, is rejected for the same rationale as claim 13.

As regarding claim 16, Kang-Abrol et al discloses the status confirmation message is transmitted to the prescribed ones of target processors if the corresponding status message is not received from the prescribed ones of the target processors within a prescribed period of time (see Kang col.4, line 1-67).

As regarding claim 17, Kang-Abrol et al discloses the prescribed period of time commences when a status request message is sent to the selected target processor (see Kang col.4, line 45-67).

As regarding claim 18, Kang-Abrol et al discloses the socket allocated to the prescribed target processors is withdrawn and a new socket is allocated when a response to the status confirmation message is received (see Abrol et al col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 14 applied equally as well to claim 18.

As regarding claim 19, Kang-Abrol et al discloses the socket allocated to the prescribed target processor is released when a response to the status confirmation message is not received (see Abrol et al col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 14 applied equally as well to claim 19.

As regarding claim 20, Kang-Abrol et al discloses the status confirmation message is executed using a User Datagram Protocol (UDP) (see Abrol et al col.10, line 42-46).

As regarding claim 21, Kang discloses allocating a socket between a call control processor (CCP) and each of a plurality of target processors (col.3, line 1-24 (loading the target application block corresponding to the target processor)); sending a request status message from the CCP to each of the target processors using the corresponding socket (col.4, line 45-67);

Kang does not expressly disclose the allocating and releasing of socket and sending a status confirmation message from the CCP to non-responding target processors; and one of reallocating the socket to the non-responding processors and releasing the socket to the non-responding processor.

Abrol et al discloses the allocating and releasing of socket (see Abrol col.10, line 23-46); and sending a status confirmation message from the CCP to non-responding target processors; (see Abrol et al col.8, line 47-67, col.9, line 1-34); and one of reallocating the socket to the non-responding processors and

releasing the socket to the non responding processor (see Abrol et al col.8, line 47-67, col.9, line 1-34).

It is obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Kang with the teaching of Abrol et al to release the socket of the target processor because by releasing the socket if it is not in use will prevent the ISP to lose revenue by such waste of an unused but heretofore unallocable port resource, as the ISPs are unable to service more users. As Abrol et al mentioned the state machine transitions the socket to the null state, which frees up the socket and makes it available for re-use (see Abrol et al col.9, line 9-13).

As regarding claim 22, Kang-Abrol et al discloses the status confirmation message is sent to target processors that fail to send a status message to the CCP in response to the status request message within a prescribed period of time (see Abrol col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 21 applied equally as well to claim 22.

As regarding claim 23, Kang-Abrol et al discloses a new socket is allocated to a non responding target processor if the non responding target processor responds to the status confirmation message (see Abrol col.8, line 47-67, col.9, line 1-34). The same motivation was utilized in claim 21 applied equally as well to claim 23.

As regarding claim 24, Kang-Abrol et al discloses the socket to the non responding target processor is released if the target processor fails to respond to

the status confirmation message (see Abrol col.8, line 47-67, col.9, line 1-34).

The same motivation was utilized in claim 21 applied equally as well to claim 24.

As regarding claim 25, Kang-Abrol et al discloses the status confirmation

message is transmited to non responding target processors in accordance with a

user Datagram protocol (UDP) (see Abrol et al col.10, line 42-46).

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Duyen M Doan whose telephone number is

(571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The

fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

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direct.uspto.gov. Should you have questions on access to the Private PAIR

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free).

Examiner
Duyen Doan
Art unit 2143